

ABSTRACT OF THE DISCLOSURE

In a gas diffusion electrode assembly, and in an electrolyzer using the same, a bonding piece having on at least one surface a perfluorosulfonic acid layer, a
5 perfluorosulfonyl fluoride layer or an alky ester of perfluorocarboxylic acid layer is positioned at its perfluoro compound layer surface with respect to the gas diffusion electrode assembly. Adjacent gas diffusion electrodes are heat fusion bonded together, or heat fusion
10 bonding is carried out using the bonding piece in a frame form. Adjacent gas diffusion electrodes are sealed up by heat fusion bonding, using a material that is similar to the material that forms the gas diffusion electrodes.